

authentic texts in an EAP situation is how much the ESP teacher should be expected to teach of the reading and how much is the responsibility of the content teacher who assigned the text. If there is a serious mismatch between the student's target language proficiency and the difficulty of the text, can the ESP teacher be expected by the content teacher to make up for all the difference in the very limited time provided in most ESP courses? In such a case, the objectives of the ESP course need to be made more realistic. Perhaps the content teacher should consider choosing a more appropriate text in terms of language level, and/or consider re-examining admissions standards.

Summary Comments

In spite of the few problems mentioned above, *ESP in Practice*, as a group study volume with a focus on evaluating ideas in ESP in terms of local conditions, appears to be a relevant and useful staff development text. The editor has been insightful in terms of the overall philosophy and objectives of the book and has been consistent in providing appropriate content and structure for implementing the objectives. Readers using this volume will find some solace by becoming aware that others around the world have similar problems/challenges in teaching ESP.

REFERENCES

Cohen, A. (in press). Student processing of feedback on their composition. In A. L. Wenden & J. Rubin (Eds.), *Learner strategies: Research directions and educational implications*. London: Pergamon.

ENGLISH FOR SCIENCE AND TECHNOLOGY: A Discourse Approach. Louis Trimble. Cambridge: Cambridge University Press, 1985. pp. 180.

Reviewed by Leslie A. Olsen

English for Science and Technology: A Discourse Approach presents a synthesis of an important approach to the study of EST and ESP. The author, Louis Trimble, is an experienced teacher of a wide variety of non-native EST students. Though he has worked mainly with university-level students, he has also taught vocational, secondary, and pre-university students, as well as been involved in many teacher education workshops and seminars. Thus, he is well qualified to make the many assessments of problems and suggestions for teaching which appear in this book.

In addition to his extensive background in designing and teaching EST courses, Professor Trimble helped pioneer the methodology outlined in this book: the rhetorical-functional approach to EST discourse. This approach focusses on (1) units of discourse larger than the sentence, (2) the rhetorical

functions of units at various levels in an EST text, (3) the impact of rhetorical-functional considerations on the choice of specific grammatical phenomena, (4) the interrelation and conceptual integration of skills needed for both reading and writing, and (5) pedagogical issues and considerations inherent in a rhetorical-functional approach.

The heart of the book is a good taxonomy and discussion of rhetorical techniques (Chapter 6), rhetorical functions (Chapter 7), and certain rhetorical-grammatical relationships (Chapter 8). The key term, rhetoric, is defined by Trimble as follows:

Rhetoric is the process a writer uses to produce a desired piece of text. This process is basically one of choosing and organizing information for a specific set of purposes and a specific set of readers. An EST text is concerned only with the presentation of facts, hypotheses, and similar types of information. It is not concerned with the forms of written English that editorialize, express emotions or emotionally based argument or are fictional or poetic in nature. (p. 10)

The rhetorical techniques discussed include (1) the “natural patterns” of time order, space order, and causality and result; and (2) the logical patterns of order of importance, comparison and contrast, analogy, exemplification, and visual illustration (use of visual aids such as charts and graphs). The rhetorical functions include the rhetoric of description, the rhetoric of definition, the rhetoric of classification, the rhetoric of instructions, and the rhetoric of visual-verbal relationships. The rhetorical-grammatical relationships include passive-stative distinctions, modal use in the rhetoric of instructions, uses of the definite article, and non-temporal use of tense. There are, of course, other candidates which might be included in a list of grammatical issues influenced by rhetorical concerns. The set treated in Chapter 8 is suggestive rather than inclusive.

Each of these three central chapters provides taxonomies of the phenomena being described, good examples of the phenomena (in the sense that the examples could be used directly in a classroom), and some comments about problems the students are likely to encounter in dealing with the material being discussed.

This central core of Chapters 6–8 is prefaced by a short introduction (Chapter 1); an orientation to the rhetorical approach (Chapter 2); a brief and general introduction to the rhetoric of EST discourse covering basic premises, the EST paragraph, rhetorical techniques, and rhetorical functions (Chapter 3); suggestions for individualizing materials or making them more relevant to individual students (Chapter 4); and finally a discussion of the paragraph in EST (Chapter 5). While much of the material in Chapters 4 and 5 is useful, the material in Chapters 2 and 3 might well have been combined with that in Chapters 7–9 to reduce a certain sense of both repetition and “jumpiness” experienced by at least this reviewer.

Chapters 6–8 on rhetorical techniques and functions and rhetorical-grammatical relationships are followed by a short discussion on lexical problems in EST discourse including the problems posed by “sub-technical” vocabulary and by noun compounds (Chapter 9). Finally the book closes with a lengthy discussion of teaching the rhetorical process. This takes each topic covered in Chapters 6–8, resummaries the main points and student problems, mentions a few new ones, and provides some proposed exercises as solutions.

Apparently, Trimble sees this book as a chance to present a coherent framework for the entire rhetorical functional approach and, secondly, to influence future generations of classroom teachers. Thus, while parts of the book provide interesting and useful comments for all EST teachers, much of the book seems to be aimed at novice EST teachers, as illustrated by the level of advice in the following:

. . . It is useful to put some of the 'best' examples (both the best 'good' and the best 'bad' examples) on transparencies, with, of course, identification removed. . . . We usually expect an assignment to be turned in either two class periods after it has been made (for example, an assignment made on a Monday would be turned in Friday) or if made on a Friday, it could easily be handed in the following Monday. (p. 139)

The book's strong pedagogical focus towards novice teachers provides sources of both strengths and weaknesses. The pedagogical focus is clearly a strength in that it provides a conceptual integration of skills needed for both reading and writing: Reading requires the ability to recognize a particular phenomena; writing requires the ability to produce the phenomena. The pedagogical focus also provides a very specific how-to-do-it approach which can be taken right into the classroom. In such terms, the book provides good examples for classroom discussion, specific assignments (often day-to-day assignments in Chapter 10), and assessments of the amount of time it will take to cover a given concept or exercise. For example,

I suggest the following average additional time for discussing each grammatical point with its relevant rhetorical function:

Description: a) passive-stative distinctions, one class hour; b) specialized uses of the definite article, one class hour; c) non-temporal choice of tense, half class hour. (p. 140)

Perhaps even more importantly, the strong pedagogical approach aimed at novice teachers provides maps for many of the shoals on which our students might otherwise founder, as illustrated below:

Few non-native students have any problem in recognizing that 'if' clauses govern possible or potential events. Where many students have trouble is in failing to see that the relationship between the 'if' and 'result' clauses is one of causality and result but contingent on the 'clause of causality' actually occurring. As a rule, once this is pointed out, the concept is quickly understood, especially as the juxtaposition of the clauses makes for a causality and result structure more easily identifiable than many in EST texts. (p. 59)

However, even though the pedagogical focus brings some impressive advantages, it also brings some serious liabilities because of the way it has been implemented. Some of these liabilities will probably make this book harder to use and less influential than it could be.

One serious liability is the lack of a *visible* scholarly base from which to draw the pedagogical recommendations. For instance, the book frequently makes assertions about the distributional characteristics of EST, such as the following:

In addition to causality and result the most commonly occurring logical patterns of paragraph development are 1. order of importance, 2. comparison and contrast, 3. analogy, 4. exemplification, and 5. visual illustration. (These are not stated in frequency of occurrence in EST texts nor in any other kind of priority; from early on we used this order and have found no reason to alter it.) (p. 59–60)

While the book makes such distributional assertions, it does not provide any data or references to support the assertions. In fact, Trimble provides few footnotes or other scholarly framework to place any of his comments on a sounder footing or to relate the work he and his colleagues have developed to other work. As the book now stands, it is a record of the EST/ESP program at one school. However, there is a rich tradition of research and debate in linguistics, applied linguistics, rhetoric, and technical communication, and it would have been appropriate for Trimble to show how his work fits into these wider contexts.

The book presents a few other concerns. As mentioned earlier, the organization leads to a certain sense of “jumpiness” and repetition. Material is first introduced and overviewed in Chapters 2–5; then covered in more detail in Chapters 6–8, with comments about problems that students may have and a specific section on teaching the item being discussed; and then covered again in Chapter 10 (“Teaching the Rhetorical Process”) from a more purely pedagogical point of view. Each of the segments (introduction, detail, pedagogy) repeats material in the process of setting up a context for commentary. Indeed, some taxonomies and suggestions for exercises appear two or more times almost verbatim. For instance, a “Summary of Rules for Classifying” appears in the central description of classification on page 94 as Chart 7.5. This same chart appears verbatim on pages 152–153 in the pedagogical section on classification.

Another both positive and negative effect of the organization is the frequent reference to other sections of the text for more complete coverage of a topic. This is positive in that it provides a richer treatment of a topic than might otherwise occur, but negative in that it provides a choppy sense of the text than strictly necessary. In particular, when the reader has addressed the major discussion of a topic in the central chapters, and been pointed to a number of problems that students would have with this topic, it would be quite natural to follow with the pedagogical treatment that is now delayed until Chapter 10.

Three other points are of more concern to scholars. First, the definition of rhetoric on which the book is based is narrower than the one traditionally used in the field of rhetoric and argumentation. Trimble’s definition explicitly excludes “the forms of written English that editorialize, express emotions or emotionally based argument or are fictional or poetic in nature.” While excluding fictional or poetic prose may seem appropriate here, I think the exclusion of editorializing or emotionally based arguments is too stringent and disallows “legitimate” prose such as the following (where the italicized comments surely qualify as editorializing):

Repairing the flyash returns is the optimal solution because of economic and downtime considerations. The three return units can *easily* be repaired by three of our employees with a downtime of *no more than* two days and a cost of *less than* \$1375, including labor. To have the units replaced, *on the other hand*, would take

at least two months' downtime and, because of our limited staff, would have to be done by outside contractors at a cost of \$70,000 or more.

As a second point of concern, the traditional scope of rhetoric has included considerations of genre and audience and overall purpose of a document, which are not covered in this book. Presumably Trimble would agree that genre, audience, and purpose could determine rhetorical functions and rhetorical-grammatical relationships.

Finally, there seems to be a tension between the philosophical stance of the book and part of the pedagogical one. The philosophical stance is that specific rhetorical functions are realized in specific grammatical structures and that specific students need individualized materials to adequately represent their ideas. The pedagogical problem is that a teacher needs to help a student learn individual rhetorical techniques and functions, and that this may be efficiently done with forms of pattern practice. In the first stance, the needs of the discourse drive the selection of a form; in the second stance, the need to learn a form drives the selection of a discourse. It is understandable, but lamentable, that the laudable goal of the first gives way before the practical "realities" of the second. It is too bad that Trimble could not have found a neater way to resolve this tension than letting the need to learn a form (or to do pattern practice) drive the selections and production of the discourse. It is a trap into which many of us have fallen.

In sum, then, *English for Science and Technology: A Discourse Approach* is a kind of record of one university's attempt to deal with ESP and the needs of non-native speakers of English trying to survive in a professional environment. The book does not usually connect itself to the wide literatures in linguistics, applied linguistics, rhetoric, or technical communication. I think this inward rather than outward looking stance ultimately makes the book less than what it could, and perhaps should, be. I say this with the understanding that it really isn't fair to want Professor Trimble to have played the piano when he tried to play the flute.

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